

autoflame



Product Catalogue

AUTOFLAME®



Product Catalogue



Issued by:

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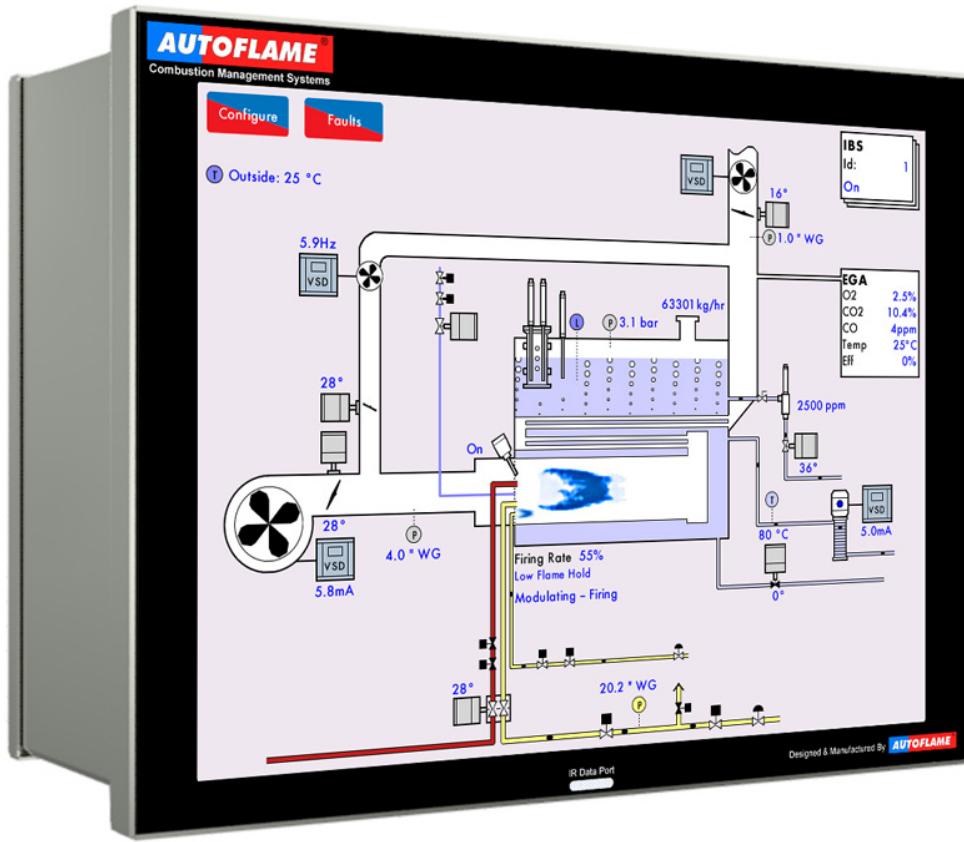
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1 MM Control Modules & Parts

1.1 Mk8 MM Control Modules – MM Burner Management Systems



Mk8 MM

Mk7 MM Electrical Specifications

Classification according to BS EN298:2012

Mains Supply: Single phase 230V, +10%/-15%} 47-63 Hz, unit max. consumption 140W
Single phase 120V, +10%/-15%}

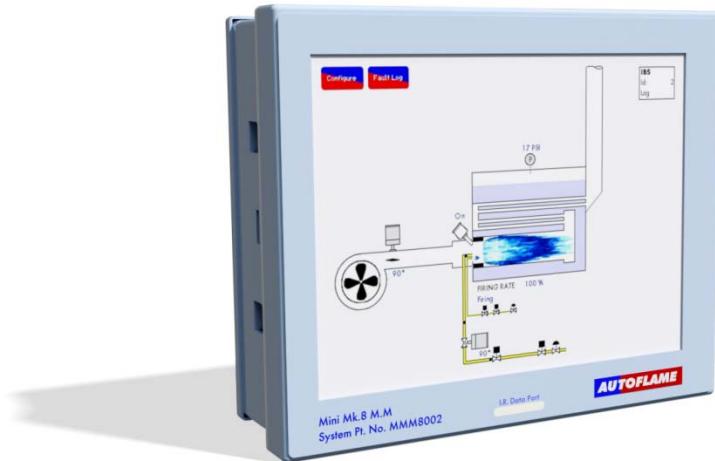
Climate:	Min. Temperature	0°C (32°F)
	Recommended Temperature	Less than 40°C (104°F)
	Max. Temperature	60°C (140°F)
	Humidity	0 to 90% non-condensing

Storage: Temperature -20 to 85°C (-4 to 185°F)

Protection Rating: The unit is designed to be panel mounted in any orientation and the front fascia is IP65, NEMA4. The back of the unit is IP20, NEMA1.

Item No.	MM Control Modules	Kgs	Part No.
1	Mk8 MM Module with Expansion Board fitted as standard 12.1" full colour touch screen, 7 channel with flame safeguard control	4.00	MM80001
<i>Mk8 Evolution voltage is universal (230V/110V)</i>			

1 MM Control Modules & Parts



Mini Mk8 MM

Mini Mk8 MM Electrical Specifications

Classification According to EN298

Mains Supply: 230V, +10%/-15% } 120V, +10%/-15% } 47-63 Hz, unit max. consumption 140W

Climate: Min. Temperature 0°C (32°F)
Recommended Temperature Less than 40°C (104°F)
Max. Temperature 60°C (140°F)
Humidity 0 to 90% non-condensing

Storage: Temperature -20 to 85°C (-4 to 185°F)

Protection Rating: The unit is designed to be panel mounted in any orientation and the front fascia is IP65, NEMA4. The back of the unit is IP20, NEMA1.

Item No.	MM Control Modules	Kgs	Part No.
2	Mini Mk8 Evolution Module 4 Channel with flame safeguard, 7" full colour touch screen	2.50	MMM8002
Mini Mk8 MM voltage is universal (230/110V)			

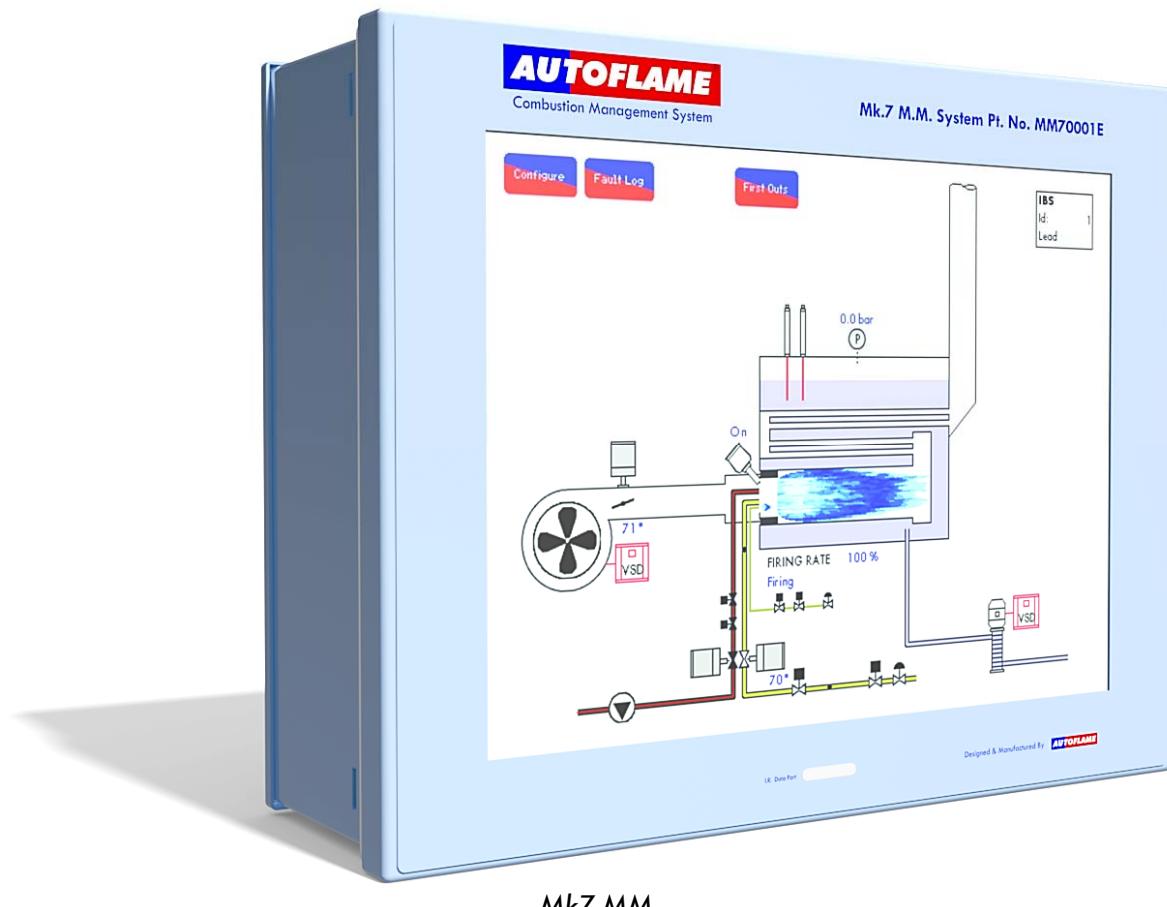
Expansion Features

Mk8 MM Expansion Software Features



Item No.	Mk8 MM Unlockable Software Features	Kgs	Part No.
3	Autoflame Water Level		MK8001
4	Analogue Water Level (requires Autoflame Water Level)		MK8002
5	Top Blowdown		MK8003
6	Bottom Blowdown		MK8004
7	Draught Control		MK8005
8	Direct Modbus		MK8006
9	First Out Annunciation		MK8007
10	Fully Metered Combustion System		MK8008
11	Heat Flow (Steam Flow + Hot Water Flow)		MK8009

1.1 Mk7 MM Control Modules – Burner Management Systems



Mk7 MM Electrical Specifications

Classification According to EN298

Mains Supply:	230V, +10%/-15%} 120V, +10%/-15%}	47 – 63 Hz, Unit max. power consumption 62W
Max Leakage:	3.5mA	
Climate:	Temperature Humidity	0 to +40°C (32 to 104°F) 0 to 90% non-condensing
Storage:	Temperature	-20 to 85°C (-4 to 185°F)
Protection Rating:	The unit is designed to be panel mounted in any orientation and the front facia is IP65, NEMA4. The back of the unit is IP20, NEMA1.	

Item No.	MM Control Modules	Kgs	Part No.
12	Mk7 MM Evolution Module 6 Channel with flame safeguard control, 10.4" full colour touch screen	3.50	MM70001/E
13	Mk7 MM Evolution Module Expansion Board, water level capability, and first out annunciation	4.00	MM70001/E/EB
<i>Mk7 Evolution voltage is universal (230V/120V)</i>			

1.3 Flame Scanners



IR Self Check Scanner

Item No.	Flame Scanners	Kgs	Part No.
14	IR Self Check Scanner <i>For use with Mk8 MM, Mini Mk8 MM and Mk7 MM</i>	0.20	MM70017

1 MM Control Modules & Parts



Self-Check UV Scanner, High Sensitivity, End View



Self-Check UV Scanner, High Sensitivity, Side View

Item No.	Flame Scanners	Kgs	Part No.
15	Self Check UV Scanner, High Sensitivity <i>End view only, 1" connection</i>	0.80	MM60003/HS
16	Self Check UV Scanner, High Sensitivity <i>Side view only</i>	0.85	MM60003/HS/SV

1 MM Control Modules & Parts



Standard UV Scanner, Side View



Standard UV Scanner, End View



Standard UV Scanner, High Sensitivity, End View



Swivel Mount Assembly, 1" connection

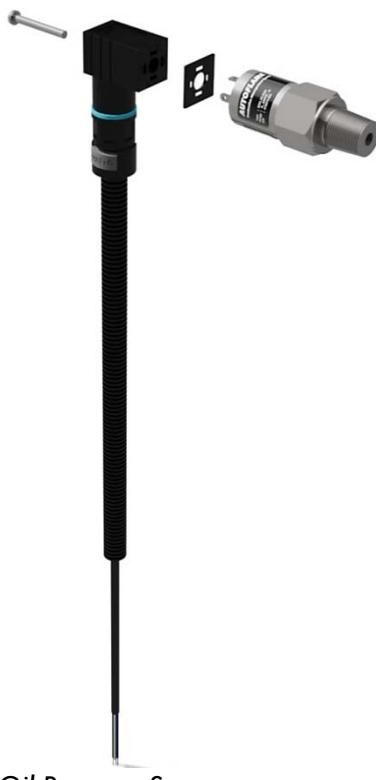
Item No.	Flame Scanners	Kgs	Part No.
17	Standard UV Scanner <i>Side view only, complete with clip and plate connection</i>	0.20	MM60004
18	Standard UV Scanner <i>End view only, 1/2" connection</i>	0.20	MM60004/U
19	Standard UV Scanner, High Sensitivity <i>End view only, 1/2" connection</i>	0.20	MM60004/HSU
20	Swivel Mount Assembly, 1" connection <i>Mounting adaptor for optimum positioning of UV scanner</i>	1.50	UVM60003
21	Swivel Mount Assembly, 1/2" connection <i>Mounting adaptor for optimum positioning of UV scanner</i>	1.50	UVM60004

1.4 Air/Gas/Oil Sensors



Air Pressure Sensor

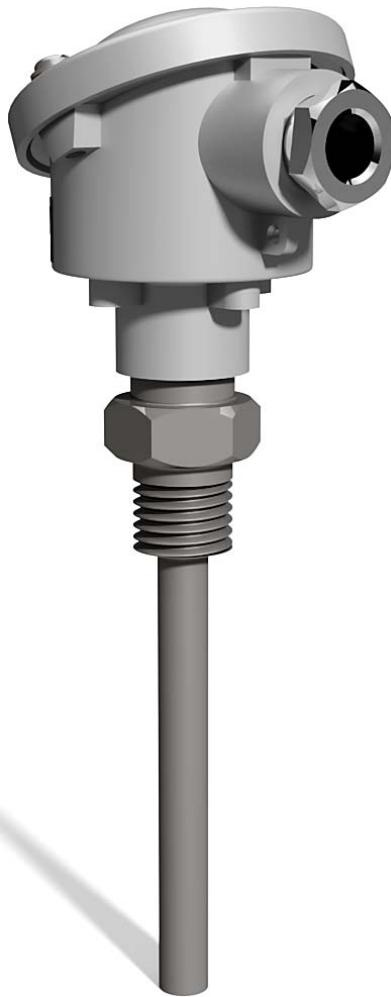
Item No.	Mk8 Air & Gas Sensors	Kgs	Part No.
22	Air Pressure Sensor 0 to 65mBar, 0 to 25"wg, 0 to 1 PSI	0.42	MM80005
23	Air Pressure Sensor 0 to 130mBar, 0 to 50"wg, 0 to 2 PSI	0.42	MM80013
24	Gas Pressure Sensor 12.5 to 65mBar, 5 to 25"wg, 0.18 to 1PSI	0.42	MM80006
25	Gas Pressure Sensor 52 to 340mBar, 25 to 135"wg, 0.75 to 5 PSI	0.42	MM80008
26	Gas Pressure Sensor 115 to 750mBar, 50 to 300"wg, 1.8 to 11 PSI	0.42	MM80011
27	Gas Pressure Sensor 207 to 1380mBar, 83 to 550"wg, 3 to 20 PSI	0.42	MM80012
Mk8 Air & Gas Sensors are suitable for usage with Mk8, Mk7 and Mk6 modules			



Oil Pressure Sensor

Item No.	Oil Sensor	Kgs	Part No.
28	Oil Pressure Sensor 0 to 40 Bar, 0 to 600 PSI	0.42	MM60009

1.5 Boiler Load Detectors – Temperatures



Temperature Detector

Item No.	Boiler Load Detectors – Temperature	Kgs	Part No.
29	Temp. Detector, 100mm length 0-400°C, 0-752°F	0.45	MM10006/100
30	Temp. Detector, 150mm length 0-400°C, 0-752°F	0.45	MM10006/150
31	Temp. Detector, 200mm length 0-400°C, 0-752°F	0.45	MM10006/200
32	Temp. Detector, 250mm length 0-400°C, 0-752°F	0.45	MM10006/250
33	Temp. Detector, 400mm length 0-400°C, 0-752°F	0.45	MM10006/400
34	Temp. Detector, 4" length With a 1/2" electrical conduit adaptor. 0-400°C, 0-752°F	0.45	MM10006/100U
35	Temp. Detector, 6" length With a 1/2" electrical conduit adaptor. 0-400°C, 0-752°F	0.45	MM10006/150U
36	Temp. Detector, 8" length With a 1/2" electrical conduit adaptor. 0-400°C, 0-752°F	0.45	MM10006/200U
37	Temp. Detector, 10" length With a 1/2" electrical conduit adaptor. 0-400°C, 0-752°F	0.45	MM10006/250U
38	Temp. Detector 15" length With a 1/2" electrical conduit adaptor. 0-400°C, 0-752°F	0.45	MM10006/400U

1.6 Boiler Load Detectors – Pressures



Pressure Detector

Item No.	Boiler Load Detectors – Temperature	Kgs	Part No.
39	Pressure Detector 2-23Bar	0.21	MM10008
40	Pressure Detector 2-38Bar	0.21	MM10009
41	Pressure Detector 0.2-3.8Bar	0.21	MM10010
42	Pressure Detector 0-100Bar	0.21	MM10017
43	Pressure Detector 30-330PSI	0.21	MM10008/U
44	Pressure Detector 50-550PSI	0.21	MM10009/U
45	Pressure Detector 1.5-55.0PSI	0.21	MM10010/U
46	Pressure Detector 0-1450PSI	0.21	MM10017/U
47	Lead for Pressure Detector	0.10	LEAD10001
Pressure detectors are supplied with a plug fitted and are not supplied with a lead. This is a separate part number LEAD10001.			

1.7 Outside Temperature Control



Outside Temperature Sensor



Outside Temperature Module

Item No.	Outside Temperature Control	Kgs	Part No.
48	Outside Temperature Sensor -40 to +40°C/ -40 to +104°F	0.32	MM60007
49	Mk6 Outside Temperature Module For use with Mk6 MM	1.00	MM60015
50	Mk7 Outside Temperature Module For use with Mini Mk8 MM or if you have more than 1 off Mk8 MM or Mk7 MM in sequence/DTI loop	1.00	MM70015

1.8 Servo Motors



Small Servomotor



Large Servomotor

Item No.	Servo Motors	Kgs	Part No.
51	Small Servo Motor, 230V 50Hz 4Nm, 3ft lbs	0.55	MM10005
52	Small Servo Motor, 110V 60Hz 4Nm, 3ft lbs *Please contact Autoflame for availability	0.55	MM10005/A
53	Small Servo Motor, 24V 50Hz 4Nm, 3ft lbs	0.55	MM10005/C
54	Small Servo Motor, 24V 60Hz 4Nm, 3ft lbs	0.55	MM10005/D
55	Small Servo Motor, 110V 50Hz 4Nm, 3ft lbs *Please contact Autoflame for availability	0.55	MM10005/E
56	Large Servo Motor, 230V 50/60Hz 25Nm, 18ft lbs	1.85	MM10004
57	Large Servo Motor, 110V 50/60Hz 25Nm, 18ft lbs *Please contact Autoflame for availability	1.85	MM10004/A
58	Large Servo Motor, 24V 50/60Hz 25Nm, 18ft lbs	1.85	MM10004/D



Industrial Servo Motor

Item No.	Servo Motors	Kgs	Part No.
59	Industrial Servo Motor 05, 230V 50/60Hz 40Nm, 37ft lbs (for feed water control only)	4.00	MM10070
60	Industrial Servo Motor 05, 110V 50/60Hz 40Nm, 37ft lbs (for feed water control only)	4.00	MM10070/110
61	Industrial Servo Motor 10, 230V 50/60 Hz 98Nm, 72ft lbs	6.00	MM10072
62	Industrial Servo Motor 10, 110V 50/60Hz 98Nm, 72ft lbs	6.00	MM10072/110
63	Industrial Servo Motor 20, 230V 50/60Hz 200Nm, 148ft lbs	6.00	MM10074/B
64	Industrial Servo Motor 20, 120V 50/60Hz 200Nm, 148ft lbs	6.00	MM10074/B/110
65	Industrial Servo Motor 40, 230V 50/60Hz 400Nm, 295ft lbs – to be used with Solid State Relays	8.00	MM10078
66	Industrial Servo Motor 40, 110V 50/60Hz 400Nm, 295ft lbs – to be used with Solid State Relays	8.00	MM10078/110
67	Industrial Servo Motor 10, 230V (4-20mA) 50/60Hz 98Nm, 148ft lbs (for use with MM VSD channels)	6.00	MM10073
68	Industrial Servo Motor 20, 230V (4-20mA) 50/60Hz 200Nm, 148ft lbs (for use with MM VSD channels)	6.00	MM10079
69	Industrial Servo Motor 40, 230V (4-20mA) 50/60Hz 400Nm, 205ft lbs (for use with MM VSD channels)	8.00	MM10080
70	Industrial Servo Motor 10, 110V (4-20mA) 50/60Hz 98Nm, 148ft lbs (for use with MM VSD channels)	6.00	MM10073/110
71	Industrial Servo Motor 40, 230V (4-20mA) 50/60Hz 200Nm, 148ft lbs (for use with the Mk7 on channel 5/6)	6.00	MM10079/110
72	Industrial Servo Motor 40, 110V (4-20mA) 50/60Hz 400Nm, 205ft lbs (for use with the Mk7 on channel 5/6)	8.00	MM10080/110
Please note voltage and frequency (Hz). Servo motors are not supplied as standard with mounting kits, only mounting screws are supplied.			

1.9 Oil Control Valves



Type 3 – Spillback/By-pass Oil Control Valve



Type 3 – Metering/Simplex Oil Control Valve



Type 2 – Spillback/By-pass Oil Control Valve



Type 2 – Metering/Simplex Oil Control Valve

Item No.	Oil Control Valves	Kgs	Part No.
73	Type 1 – Spillback/By-pass	0.60	OVS31015
74	Type 1 – Metering/Simplex	0.60	OVM31015
75	Type 2 – Spillback/By-pass	0.60	OVS32016
76	Type 2 – Metering/Simplex	0.60	OVM32016
77	Type 3 – Spillback/By-pass	1.80	OVS33L17
78	Type 3 – Metering/Simplex	1.80	OVM33L17
79	Type 4 – Spillback/By-pass	1.80	OVS34L18
80	Type 4 – Metering/Simplex	1.80	OVM34L18
81	Type 5 – Spillback/By-pass	0.50	OVS35019
82	Type 5 – Metering/Simplex	0.50	OVM35019
83	Type 6 – Spillback/By-pass	0.50	OVS36020
84	Type 6 – Metering/Simplex	0.50	OVM36020
85	Type 8 – Spillback/By-pass	0.50	OVS38022
86	Type 8 – Metering/Simplex	0.50	OVM38022
87	Type 9 – Spillback/By-pass	0.50	OVS39023
88	Type 9 – Metering/Simplex	0.50	OVM39023

Stainless steel body with stainless bobbin and Viton O rings fitted as standard.
 On certain applications other materials may be required. Please contact Autoflame for more information. All valves are fitted with an NPT thread.

1.10 Gas Control Butterfly Valves (Threaded)



3" Gas Control Butterfly Valve (Threaded) with Small Servomotor

Item No.	Gas Control Butterfly Valves (Threaded)	Kgs	Part No.
89	BSP 25mm (1")	0.55	GV42521
90	BSP 40mm (1.5")	0.70	GV44022
91	BSP 50mm (2")	0.74	GV45023
92	BSP 65mm (2.5")	0.85	GV46524
93	BSP 80mm (3")	0.98	GV48025
94	BSP 100mm (4")	1.00	GV410026
95	NPT 25mm (1")	0.55	GV42421U
96	NPT 40mm (1.5")	0.70	GV44022U
97	NPT 50mm (2")	0.74	GV45023U
98	NPT 65mm (2.5")	0.85	GV46524U
99	NPT 80mm (3")	0.98	GV48025U
100	NPT 100mm (4")	1.00	GV410026U

Valve body manufactured from aluminium. Other materials available on request.
Butterfly disc and drive manufactured from 316 Stainless Steel as standard.

1.11 Gas Control Butterfly Valves (Flanged 30mm)

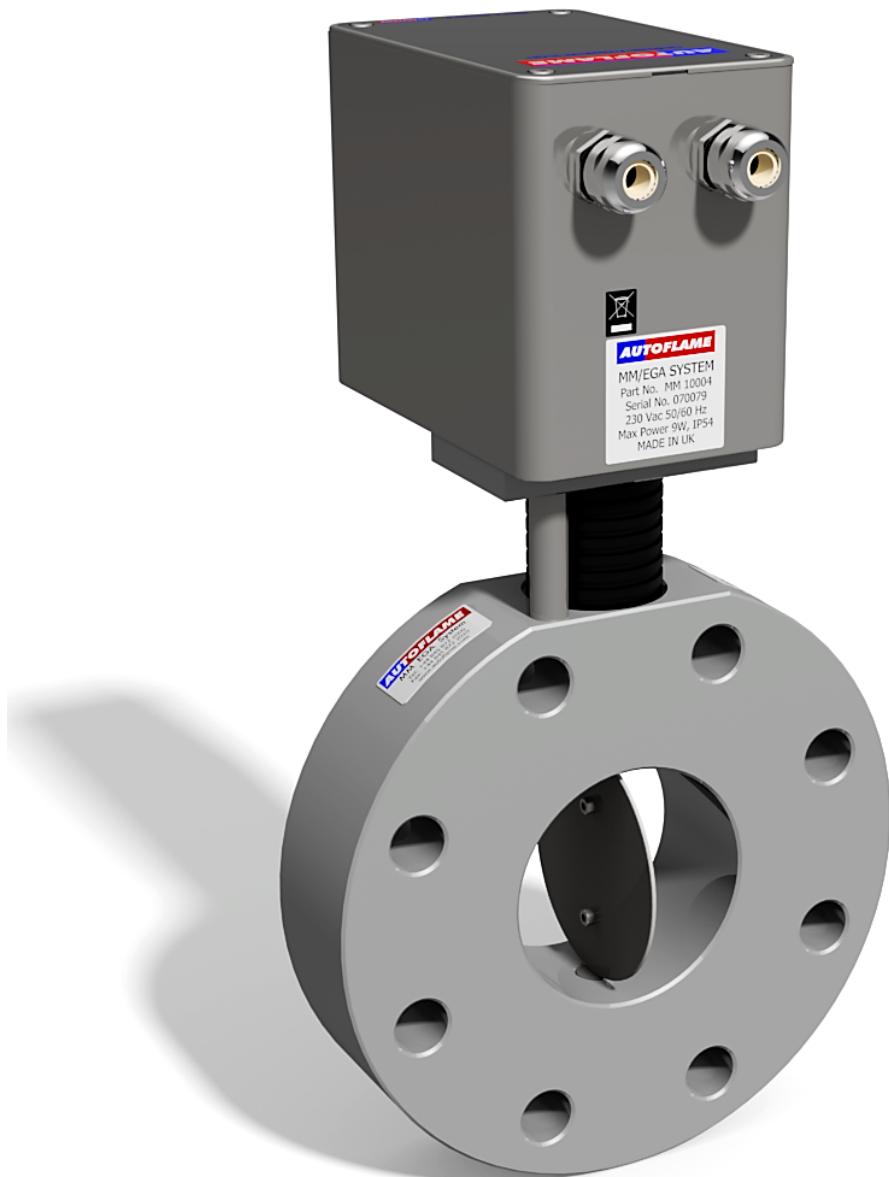


Gas Control Butterfly Valve (Flanged 30mm) with Small Servomotor

Item No.	Gas Control Butterfly Valves (Flanged 30mm)	Kgs	Part No.
101	PN16 65mm (2.5")	5.00	GVF46526/30
102	PN16 80mm (3")	6.00	GVF48027/30
103	PN16 100mm (4")	7.00	GVF410026/30
104	PN16 125mm (5")	8.00	GVF12527/30
105	PN16 150mm (6")	9.00	GVF415028/30
106	ANSI 150lb 65mm (2.5")	5.00	GVF46526/30U
107	ANSI 150lb 80mm (3")	6.00	GVF48027/30U
108	ANSI 150lb 100mm (4")	7.00	GVF410026/30U
109	ANSI 150lb 125mm (5")	8.00	GVF12527/30U
110	ANSI 150lb 150mm (6")	9.00	GVF415028/30U

*Valve body manufactured from aluminium. Other materials available on request.
Butterfly disc and drive manufactured from 316 Stainless Steel as standard.*

1.12 Gas Control Butterfly Valves (Flanged 50mm)



Gas Control Butterfly Valve (Flanged 50mm) with Large Servomotor

Item No.	Gas Control Butterfly Valves (Flanged 50mm)	Kgs	Part No.
111	PN16 65mm (2.5")	9.00	GVF46526/50
112	PN16 80mm (3")	10.00	GVF48027/50
113	PN16 100mm (4")	11.00	GVF410026/50
114	PN16 125mm (5")	12.00	GVF12527/50
115	PN16 150mm (6")	13.00	GVF415028/50
116	ANSI 150lb 65mm (2.5")	9.00	GVF46526/50U
117	ANSI 150lb 80mm (3")	10.00	GVF48027/50U
118	ANSI 150lb 100mm (4")	11.00	GVF410026/50U
119	ANSI 150lb 125mm (5")	12.00	GVF12527/50U
120	ANSI 150lb 150mm (6")	13.00	GVF415028/50U

Valve body manufactured from aluminium. Other materials available on request.
Butterfly disc and drive manufactured from 316 Stainless Steel as standard.

2 EGA Modules & Parts

2.1 EGA Components



Mk8 Exhaust Gas Analyser

Technical Specifications

Electrical Supply:	230/110V 50/60Hz
Power:	160W
Max Power Consumption:	225W
Fuse Rating:	4A
Pump Flow:	110-120mBar, 600mL/min
Environmental Rating:	IP20, NEMA 1
Surrounding Temperature Range:	5°C (40°F) - 40°C (104°F)

Item No.	EGA Components	Kgs	Part No.
121	Mk8 EGA Sampling Unit O2, CO2, CO & NO analyser, 10.4" full colour touch screen	11.00	MM82004
122	Mk8 E.P.A. EGA Sampling Unit MM820004, EPA Compliant, Self-Cal Box & Heated Sample	13.00	MM82004/EPA
123	Mk8 M.C.E.R.T. EGA Sampling Unit* MM82004, MCERT's approval	13.00	MM82004/MCERT
124	Mk8 EGA Sampling Unit Standard EGA with only CO2 cell fitted, no SO2 or NO2 cells	11.00	MM82004/NC

*The MCERT's Mk8 EGA Sampling unit will be available upon completion of testing and certification. For further information please contact Autoflame.

For the EPA and MCERT EGA's a Heated Sampling Line will be supplied at a standard length of 3m (10ft). Longer lengths are available, please contact Autoflame for pricing.

2 EGA Modules & Parts



EGA Sampling Probe



External Particulate Filter

Item No.	EGA Components	Kgs	Part No.
125	Mk7 EGA SO ₂ Sensor <i>Factory fitted and calibrated, price to be added to EGA price</i>	0.20	EGA80008
126	Mk7 EGA NO ₂ Sensor <i>Factory fitted and calibrated, price to be added to EGA price</i>	0.20	EGA80009
127	Mk7 EGA Air Inlet Filter <i>Filter assembly includes filter material</i>	2.00	EGA80106
128	EGA Mk7 Sampling Probe (0-400°C or 32-752°F) <i>Flue gas sampling probe and thermocouple</i>	1.00	MM10033
129	Chilled EGA Enclosure <i>Front mounted chiller unit to keep EGA cool, excluding EGA</i>		EGAENC
130	Mk8 EGA External Particulate Filter with drain solenoid <i>EGA must be returned to office to fit EGA80103/D</i>	2.00	EGA80103/D
131	Mk7 EGA External Particulate Filter with drain solenoid <i>EGA must be returned to office to fit EGA20103/D</i>	2.00	EGA20103/D
<p><i>Sampling probes can be manufactured with a longer length if required. Please contact Autoflame for a price and lead time.</i></p> <p><i>Ceramic sampling probe available on request. Please contact Autoflame for a price and lead time.</i></p> <p><i>Heated and plain enclosures available. Please contact Autoflame for pricing.</i></p>			

3 DTI Modules & Parts

3.1 Remote Monitoring and Control



Mk7 DTI

Mains Supply:	230V, +10%/-15%} 120V, +10%/-15%}	47 – 63 Hz, Unit max. power consumption 184W
Climate:	Temperature Humidity	0 to +40°C (32 to 104°F) 0 to 90% non-condensing
Storage:	Temperature	-20 to 85°C (-4 to 185°F)
Protection Rating:	The unit is designed to be panel mounted in any orientation and the front facia is IP65, NEMA4. The back of the unit is IP20, NEMA1.	

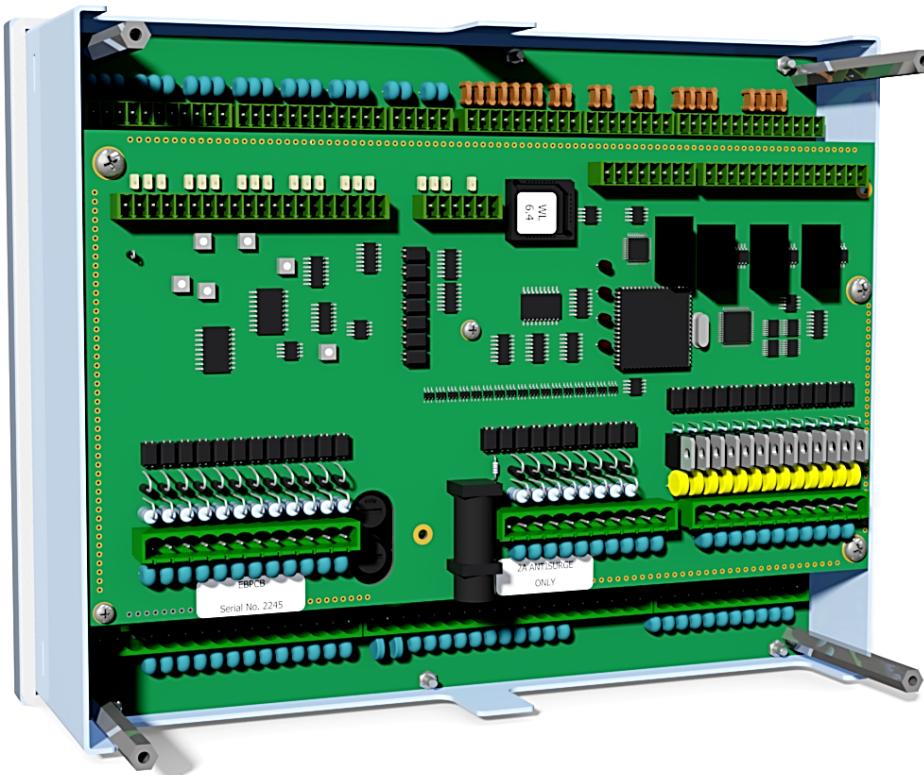
Item No.	DTI Data Transfer Interface Modules	Kgs	Part No.
132	Mk7 DTI System Package Ethernet + Modbus , CEMS Supervisor Software	3.50	DTI70100
133	Mk7 I/O Module 6 x 4-20mA I/O, 16 x 230/110V Inputs, 8 x volt free contacts	1.00	DTI70022
<i>Mk7 DTI & Mk7 I/O Module Voltage is universal (230/110V)</i>			

3.2 PC Software and Accessories

Item No.	PC Software and Accessories	Kgs	Part No.
134	Mk7 DTI CEMS Manager Software Licence for CEMS Manager Software	0.25	DTI70101
135	ProtoNode Converter Modbus to BACnet (for use with Mk7 DTI)	0.25	DTICONVBAC
136	Download Manager Software on USB Stick + IR Lead (including Serial Number and Activation Code)	0.13	MM80010
137	Download Manager Software on USB Stick (including Serial Number and Activation Code)	0.00	MM80010/NLA
138	Serial Number and Activation Code for Download Manager Software	0.00	MM80010/NLB
<i>Download Manager software is compatible with Mini Mk8 MM and Mk8 MM</i>			

4 Water Level Control

4.1 Water Level Control Equipment



Mk7 Expansion Board

Item No.	Water Level Control Equipment	Kgs	Part No.
139	Mk7 Expansion Board Supplied with MK7PROMS/WL software	0.55	EB70001
140	Mk7 Expansion Board & Enclosure Mounting Kit With housing & pillars, supplied with MK7PROMS/WL software	0.75	EB70002
141	Temp. Detector, 100mm length 0-400°F	0.45	MM10006/100
142	Temp. Detector, 150mm length 0-400°F	0.45	MM10006/150
143	Temp. Detector, 200mm length 0-400°F	0.45	MM10006/200
144	Temp. Detector, 250mm length 0-400°F	0.45	MM10006/250
145	Temp. Detector, 400mm length 0-400°F	0.45	MM10006/400
146	Temp. Detector, 4" length With a 1/2" electrical conduit adaptor. 0-752°F	0.45	MM10006/100U
147	Temp. Detector, 6" length With a 1/2" electrical conduit adaptor. 0-752°F	0.45	MM10006/150U
148	Temp. Detector, 8" length With a 1/2" electrical conduit adaptor. 0-752°F	0.45	MM10006/200U
149	Temp. Detector, 10" length With a 1/2" electrical conduit adaptor. 0-752°F	0.45	MM10006/250U
150	Temp. Detector, 15" length With a 1/2" electrical conduit adaptor. 0-752°F	0.45	MM10006/400U

4.2 Steam Boiler Capacitance Probes



Capacitance Probe



Capacitance Probe – Internal View

Item No.	Steam Boiler Capacitance Probes	Kgs	Part No.
151	Capacitance Probe 20" (500mm) Supplied with 2m (6ft) flying lead	1.50	WLCP500
152	Capacitance Probe 30" (750mm) Supplied with 2m (6ft) flying lead	1.50	WLCP750
153	Capacitance Probe 40" (1000mm) Supplied with 2m (6ft) flying lead	1.50	WLCP1000
154	Capacitance Probe 50" (1250mm) Supplied with 2m (6ft) flying lead	1.50	WLCP1250
155	Capacitance Probe 60" (1500mm) Supplied with 2m (6ft) flying lead	1.50	WLCP1500
Additional capacitance probe lengths are available upon request. Please contact Autoflame for price and availability.			

4.3 2nd Low Probe

Item No.	2 nd Low Probe	Kgs	Part No.
156	2 nd Low Safety Probe Supplied with 2m (6ft) flying lead	1.50	SLP70001

4.4 Total Dissolved Solids Equipment



Item No.	Total Dissolved Solids Equipment	Kgs	Part No.
157	TDS Management, 230V <i>With complete assembly, including probe and solenoid valve</i>	3.00	TDS70001
158	TDS Management, 110V <i>With complete assembly, including probe and solenoid valve</i>	3.00	TDS70001/110
159	TDS Management, Modulating, 230V, ½" <i>With complete assembly, including probe, 1.2" modulating valve, 230V servomotor</i>	3.00	TDS70001/M15
160	TDS Management, Modulating 230V, ¾" <i>With complete assembly, including probe, ¾" modulating valve, 230V servomotor</i>	3.00	TDS70001/M20
161	TDS Management, Modulating 24V, ½" <i>With complete assembly, including probe, ¾" modulating valve, 24V servomotor</i>	3.00	TDS70001/M15/D
162	TDS Management, Modulating 24V, ¾" <i>With complete assembly, including probe, ½" modulating valve, 24V servomotor</i>	3.00	TDS70001/M20/D
163	TDS Solenoid Valve, 230V 230V solenoid	1.00	TDS70002
164	TDS Solenoid Valve, 110V 110V Solenoid	1.00	TDS70002/110
165	TDS Probe only	2.00	TDS70003

4.5 Water Control Valves



Threaded Water Valve 0.75" with Large Servomotor

Item No.	Water Valves – Feed Water, Bottom Blowdown & TDS	Kgs	Part No.
166	Threaded Water Valve BSP/NPT (0.5"/15mm) 0.5" Feed water valve with coupling	4.00	WLCVO15
167	Threaded Water Valve BSP/NPT (0.75"/20mm) 0.75" Feed water valve with coupling	5.00	WLCVO20
168	Flanged Water Valve PN40 (1"/25mm) 1" Feed water valve with coupling	7.00	WLCVO25/FL
169	Flanged Water Valve PN40 (1.5"/40mm) 1.5" Feed water valve with coupling	8.00	WLCVO40/FL
170	Flanged Water Valve PN40 (2"/50mm) 2" Feed water valve with coupling	9.00	WLCVO50/FL
171	Flanged Water Valve ANSI 300lb (1"/25mm) 1" Feed water valve with coupling	7.00	WLCVO25/FLU
172	Flanged Water Valve ANSI 300lb (1.5"/40mm) 1.5" Feed water valve with coupling	8.00	WLCVO40/FLU
173	Flanged Water Valve ANSI 300lb (2"/50mm) 2" Feed water valve with coupling	9.00	WLCVO50/FLU
<p>The water valves are suitable for feed water, bottom blowdown and top blowdown applications. The water valves are equipped with couplings and mounting brackets. The water valves are not supplied with servomotor. For the 0.5" and 0.75" valves, large servomotors must be used, for 1" and 1.5" valves UNIC05 servomotors, for the 2" UNIC10.</p>			

4.6 Bottom Blowdown

Item No.	Bottom Blowdown Valves	Kgs	Part No.
174	Bottom Blowdown Control Module 110/230V 50/60Hz – Battery not included, contact Autoflame		BBC70004
175	Bottom Blowdown Industrial Actuator 05 24V DC Only, 40NM 37ft lbs IP65, -25 to 55°C (-13 to 131°F)		BBA10070
176	Bottom Blowdown Industrial Actuator 10* 24V DC Only, 40NM 37ft lbs IP65, -25 to 55°C (-13 to 131°F)		BBA10072
177	1"(25mm) Bottom Blowdown Valve Complete with 24V DC Actuator and Control Module		BBV025 System
178	1.5"(40mm) Bottom Blowdown Valve Complete with 24V DC Actuator and Control Module		BBV040 System
179	2"(50mm) Bottom Blowdown Valve Complete with 24V DC Actuator and Control Module		BBV050 System
<p>*For use with 2" Bottom Blow Down Valve.</p> <p>All costs exclude any kind of approval and/or testing that may be required. Also excludes additional hardware/mating flanges etc. or any kind of installation, service or calibration.</p>			

5 Peripheral & Spare Parts

5.1 End Switch Proving

Item No.	End Switch Proving	Kgs	Part No.
180	End Switch Proving Unit With 1 metre lead(3ft)	1.00	MM70009PPU
181	Small Oil Valve Base Plate Allows for end switch proving unit to be mounted to existing small oil valve	0.10	MM70009OVSM
182	Large Oil Valve Base Plate Allows for end switch proving unit to be mounted to existing large oil valve	0.10	MM70009OVLRG
183	Air Damper Mounting Kit	0.20	MM70009UMK
<p><i>End switches must be ordered separately. They are not included with modified gas or oil valves. Please contact Autoflame for more information.</i></p>			

5.2 End Switch Proving – Modified Oil Valves

Item No.	End Switch Proving – Modified Oil Valves	Kgs	Part No.
184	Type 1 – Spillback/By-pass <i>Modified for mounting end switch proving unit</i>	0.60	OVS31015/VA
185	Type 1 – Metering/Simplex <i>Modified for mounting end switch proving unit</i>	0.60	OVM31015/VA
186	Type 2 – Spillback/By-pass <i>Modified for mounting end switch proving unit</i>	0.60	OVS32016/VA
187	Type 2 – Metering/Simplex <i>Modified for mounting end switch proving unit</i>	0.60	OVM32016/VA
188	Type 3 – Spillback/By-pass <i>Modified for mounting end switch proving unit</i>	1.80	OVS33L17/VA
189	Type 3 – Metering/Simplex <i>Modified for mounting end switch proving unit</i>	1.80	OVM33L17/VA
190	Type 4 – Spillback/By-pass <i>Modified for mounting end switch proving unit</i>	1.80	OVS34L18/VA
191	Type 4 – Metering/Simplex <i>Modified for mounting end switch proving unit</i>	1.80	OVM34L18/VA
192	Type 5 – Spillback/By-pass <i>Modified for mounting end switch proving unit</i>	0.50	OVS35019/VA
193	Type 5 – Metering/Simplex <i>Modified for mounting end switch proving unit</i>	0.50	OVM35019/VA
194	Type 6 – Spillback/By-pass <i>Modified for mounting end switch proving unit</i>	0.50	OVS36020/VA
195	Type 6 – Metering/Simplex <i>Modified for mounting end switch proving unit</i>	0.50	OVM36020/VA
196	Type 8 – Spillback/By-pass <i>Modified for mounting end switch proving unit</i>	0.50	OVS38022/VA
197	Type 8 – Metering/Simplex <i>Modified for mounting end switch proving unit</i>	0.50	OVM38022/VA
198	Type 9 – Spillback/By-pass <i>Modified for mounting end switch proving unit</i>	0.50	OVS39023/VA
199	Type 9 – Metering Simplex <i>Modified for mounting end switch proving unit</i>	0.50	OVM39023/VA
<p><i>End switches must be ordered separately, they are not included with modified oil valves.</i></p>			

5.3 End Switch Proving Gas Control Butterfly Valves

Item No.	End Switch Proving – Modified Gas Butterfly Valves	Kgs	Part No.
200	ANSI 150lb 65mm (2.5") <i>Thickness -30mm. Modified for mounting end switch proving unit, mounting kit</i>	5.00	GVF46526/30U/VA
201	ANSI 150lb 80mm (3") <i>Thickness -30mm. Modified for mounting end switch proving unit, mounting kit</i>	6.00	GVF48027/30U/VA
202	ANSI 150lb 100mm (4") <i>Thickness -30mm. Modified for mounting end switch proving unit, mounting kit</i>	7.00	GVF41006/30U/VA
203	ANSI 150lb 125mm (5") <i>Thickness -30mm. Modified for mounting end switch proving unit, mounting kit</i>	8.00	GVF42527/30U/VA
204	ANSI 150lb 150mm (6") <i>Thickness -30mm. Modified for mounting end switch proving unit, mounting kit</i>	9.00	GVF415028/30U/VA
205	ANSI 150lb 65mm (2.5") <i>Thickness -50mm. Modified for mounting end switch proving unit, mounting kit</i>	9.00	GVF46526/50U/VA
206	ANSI 150lb 80mm (3") <i>Thickness -50mm. Modified for mounting end switch proving unit, mounting kit</i>	10.00	GVF48027/50U/VA
207	ANSI 150lb 100mm (4") <i>Thickness -50mm. Modified for mounting end switch proving unit, mounting kit</i>	11.00	GVF410026/50U/VA
208	ANSI 150lb 125mm (5") <i>Thickness -50mm. Modified for mounting end switch proving unit, mounting kit</i>	12.00	GVF42527/50U/VA
209	ANSI 150lb 150mm (6") <i>Thickness -50mm. Modified for mounting end switch proving unit, mounting kit</i>	13.00	GVF415028/50U/VA
<i>End switches must be ordered separately, they are not included with modified gas valves.</i>			

5.4 Flue Gas Recirculation (FGR) Valves



Flue Gas Recirculation Valve

Item No.	Flue Gas Recirculation (FGR) Valves	Kgs	Part No.
210	PN16 100mm(4") Thickness-50mm		FGRV410026/50
211	PN16 150mm(6") Thickness-50mm		FGRV415028/50
212	PN16 200mm(8") Thickness-50mm		FGRV420029/50
213	PN16 250mm(10") Thickness-50mm		FGRV425030/50
214	PN16 300mm(12") Thickness-50mm		FGRV430031/50
215	ANSI 150lb 100mm(4") Thickness-50mm		FGRV410026/50U
216	ANSI 150lb 150mm(6") Thickness-50mm		FGRV415028/50U
217	ANSI 150lb 200mm(8") Thickness-50mm		FGRV420029/50U
218	ANSI 150lb 250mm(10") Thickness-50mm		FGRV425030/50U
219	ANSI 150lb 300mm(12") Thickness-50mm		FGRV430031/50U
<p><i>Valve manufactured from 303 Stainless steel. Please contact Autoflame if the size you require is not listed.</i></p>			

5.5 Hazardous Environment/ Explosion Proof Equipment ATEX



Small Servo Motor, 230V, Atex Approved

Item No.	Hazardous Environment/Explosion Proof with ATEX	Kgs	Part No.
220	Large Servo Motor, 230V 50/60Hz 25Nm, 18ft lbs. Ex nA nL IIC T4	1.85	MM10004/EXP
221	Large Servo Motor, 244V 50/60Hz 25Nm, 18ft lbs. Ex nA nL IIC T4	1.85	MM10004/D/EXP
222	Small Servo Motor, 230V 50Hz *Pending Approval* 4Nm, 3ft lbs. Ex nA nL IIC T4	1.85	MM10005/EXP
223	Small Servo Motor, 230V 60Hz *Pending Approval* 4Nm, 3ft lbs. Ex nA nL IIC T4	1.85	MM10005/B/EXP
224	Small Servo Motor, 24V 60Hz *Pending Approval* 4Nm, 3ft lbs. Ex nA nL IIC T4	1.85	MM10005/D/EXP
225	Small Servo Motor, 24V 50Hz *Pending Approval* 4Nm, 3ft lbs. Ex nA nL IIC T4	1.85	MM10005/C/EXP
226	Industrial Servo Motor 10, 230V 98Nm, 72ft lbs. Ex nA nL IIC T4	6.00	MM10072/EXP
227	Industrial Servo Motor 10, 120V 98Nm, 72 ft lbs. Ex nA nL IIC T4	6.00	MM10072/110/EXP
228	Air Pressure Sensor 0 to 65mBar, 0 to 25" wg, 0 to 1 PSI. Ex Na IIC Gc	0.42	MM60005/EXP
229	Air Pressure Sensor 0 to 120mBar, 0 to 50"wg, 0 to 2 PSI. Ex Na IIC Gc	0.42	MM60013/EXP
230	Gas Pressure Sensor 12.5 to 65mBar, 5 to 25"wg, 0.18 to 1 PSI. Ex Na IIC Gc	0.42	MM60006/EXP
231	Gas Pressure Sensor 52 to 340mBar, 25 to 1325"wg ,0.75 to 5 PSI. Ex Na IIC Gc	0.42	MM60008/EXP
232	Gas Pressure Sensor 115 to 750mBar, 50 to 300"wg,1.8 to 11 PSI. Ex Na IIC Gc	0.42	MM60011/EXP
233	Gas Pressure Sensor 207 to 1380mBar, 83 to 550"wg,3 to 20 PSI. Ex Na IIC Gc	0.42	MM60012/EXP
234	Gas Pressure Sensor 0 to 4mBar, 162 to 1620"wg, 6 to 60 PSI. Ex Na IIC Gc	0.42	MM60014/EXP
235	UV Sensor, End View - Explosion Proof 1/2" connection	0.20	MM60004/U/EXP
236	Self Check UV Sensor - Explosion Proof High Sensitivity, End View only, 1" connection	0.80	MM60003/HS/EXP
<p>Please note voltage and frequency. Servo motors are not supplied as standard with mounting kits.</p>			

5.6 Factory Built Single Fuel UL Control Panel

Item No.	Factory Built Control Panels – Single Fuel UL Panel	Kgs	Part No.
237	Single fuel UL panel 230V Fitted with Mk8 MM		CP1MK8/E
238	Single fuel UL panel 110V Fitted with Mk8 MM		CP1MK8/E/110
239	Single fuel UL panel 230V Fitted with Mk8 MM & First Out Annunciation		CP1AMK8/E
240	Single fuel UL panel 110V Fitted with Mk8 MM & First Out Annunciation		CP1AMK8/E/110
241	Single fuel UL panel 230V Fitted with Mk8 MM, First Out Annunciation & Water Level		CP1WMK8/E
242	Single fuel UL panel 110V Fitted with Mk8 MM First Out Annunciation & Water Level		CP1WMK8/E/110
243	Single fuel UL panel 230V Fitted with Mini Mk8 MM		CP1MMK8/E
244	Single fuel UL panel 110V Fitted with Mini Mk8 MM		CP1MMK8/E/110
<p>Standard specification control panel: Equipped with Autoflame MM controller. NEMA4 powder coated enclosure to match MM controller. Fully wired and tested. Supplied with control panel drawings.</p> <p>Standard panel size – 800mm x 600mm x 300mm enclosure (31.4" x 23.6" x 11.8") Standard water level panel size – 800mm x 800mm x 300m enclosure (31.4" x 41.4" x 11.8")</p> <p>Standard single fuel scope of supply includes: Fuel 1 On/Off Push Button – Panel on Lamp – Burner on/Off Switch – Lockout Alarm/Reset (Not available on Mini Mk8) – Hand/Auto/Low Flame Hold Switch(Not available on Mini Mk8) – Lamp as per customer request</p> <p>Standard Single Fuel Water Level scope of supply includes: Fuel 1 On/Off Push Button – Panel On Lamp – Burner On/Off Switch – Lockout Alarm/Reset – Hand/Auto/Low Flame Hold Switch – High Water Lamp – Low Water Lamp – 2nd Low Water Lamp – Water Level System Test – Water Level Alarm Mute</p> <p>Additional lamps/switches are available upon request. Fuses and contactors with overloads are not supplied as standard.</p> <p>Please contact Autoflame before ordering a panel so that the specifics can be determined at an early date. After receiving an order for a panel, drawings will be submitted for approval by the customer.</p> <p>Once approved, manufacturing will commence. Lead-times on control panels vary from 4 to 6 weeks from approval of drawings. Prices are subject to change due to specific customer requirements.</p> <p>Custom sizes are available on request. Please contact Autoflame for further information and a quote on non-standard panels.</p>			

5.7 Factory Built Dual Fuel UL Control Panel

Item No.	Factory Built Control Panels – Dual Fuel UL Panel	Kgs	Part No.
245	Dual fuel UL panel 230V Fitted with Mk8 MM		CP2MK8/E
246	Dual fuel UL panel 110V Fitted with Mk8 MM		CP2MK8/E/110
247	Dual fuel UL panel 230V Fitted with Mk8 MM & First Out Annunciation		CP2AMK8/E
248	Dual fuel UL panel 110V Fitted with Mk8 MM & First Out Annunciation		CP2AMK8/E/110
249	Dual fuel UL panel 230V Fitted with Mk8 MM, First Out Annunciation & Water Level		CP2WMK8/E
250	Dual fuel UL panel 110V Fitted with Mk8 MM First Out Annunciation & Water Level		CP2WMK8/E/110
251	Dual fuel UL panel 230V Fitted with Mini Mk8 MM		CP2MMK8/E
252	Dual fuel UL panel 110V Fitted with Mini Mk8 MM		CP2MMK8/E/110
<p>Standard specification control panel: Equipped with Autoflame MM controller. NEMA4 powder coated enclosure to match MM controller. Fully wired and tested. Supplied with control panel drawings.</p> <p>Standard panel size – 800mm x 600mm x 300mm enclosure (31.4" x 23.6" x 11.8") Standard water level panel size – 800mm x 800mm x 300m enclosure (31.4" x 41.4" x 11.8")</p> <p>Standard dual fuel scope of supply includes: Fuel 1 On/Off Push Button – Fuel 2 On/Off Push Button – Burner on/Off Switch – Lockout Alarm/Reset (Not available on Mini Mk8) – Hand/Auto/Low Flame Hold Switch(Not available on Mini Mk8) – Lamp as per customer request</p> <p>Standard dual fuel water level scope of supply includes: Fuel 1 On/Off Push Button – Fuel 2 On/Off Push Button – Burner On/Off Switch – Lockout Alarm/Reset – Hand/Auto/Low Flame Hold Switch – High Water Lamp – Low Water Lamp – 2nd Low Water Lamp – Water Level System Test – Water Level Alarm Mute</p> <p>Additional lamps/switches are available upon request. Fuses and contactors with overloads are not supplied as standard.</p> <p>Please contact Autoflame before ordering a panel so that the specifics can be determined at an early date. After receiving an order for a panel, drawings will be submitted for approval by the customer.</p> <p>Once approved, manufacturing will commence. Lead-times on control panels vary from 4 to 6 weeks from approval of drawings. Prices are subject to change due to specific customer requirements.</p> <p>Custom sizes are available on request. Please contact Autoflame for further information and a quote on non-standard panels.</p>			

5.8 CB Control Panel Retrofit

Item No.	CB Control Panel Retrofit Single/Dual Fuel UL Panel	Kgs	Part No.
253	Single fuel UL panel 230V <i>Fitted with Mk8 MM, CB control panel retrofit</i>		CP1MK8/E/CB
254	Dual fuel UL panel 110V <i>Fitted with Mk8 MM, CB control panel retrofit</i>		CP2MK8/E/CB
255	Single fuel UL panel 230V <i>Fitted with Mini Mk8 MM, CB control panel retrofit</i>		CP1/MMK8/E/CB
256	Dual fuel UL panel 110V <i>Fitted with Mini Mk8 MM, CB control panel retrofit</i>		CP2/MMK8/E/CB
<p>Standard specification control panel: Equipped with Autoflame MM controller. NEMA4 powder coated enclosure to match MM controller. Fully wired and tested. Supplied with control panel drawings.</p> <p>Standard panel size – 600mm x 500mm x 210mm enclosure (23.6" x 19.7" x 8.3")</p> <p>Standard scope of supply includes: Fuel Select OFF/Fuel 1 switch (single fuel) or Fuel Select Fuel 1/OFF/Fuel 2 switch (dual fuel) – Burner On/Off Switch – Lockout Alarm Mute(Not available on Mini Mk8) – Hand/Auto/Low Flame Hold Switch (Not available on Mini Mk8) – Lamp as per customer request.</p> <p>Note: 110V direct supply only, transformers and Variable Speed Drive cannot be added to this panel. Also water level, first out annunciation, additional lamps/switches, fuses and contactors are not available due to panel size.</p> <p>Please contact Autoflame before ordering a panel so that the specifics can be determined at an early date. After receiving an order for a panel, drawings will be submitted for approval by the customer.</p> <p>Once approved, manufacturing will commence. Lead-times on control panels vary from 4 to 6 weeks from approval of drawings. Prices are subject to change due to specific customer requirements.</p> <p>Custom sizes are available on request. Please contact Autoflame for further information and a quote on non-standard panels.</p>			

5.9 Mini Mk8 MM Control Panel

Item No.	Mini Mk8 MM Control Panel Single/Dual Pending UL	Kgs	Part No.
257	Single Fuel UL Panel 230V <i>Fitted with Mini Mk8 MM</i>		CP1MMK8/E/SM
258	Single Fuel UL Panel 110V <i>Fitted with Mini Mk8 MM</i>		CP1MMK8/E/110/SM
259	Dual Fuel UL Panel 230V <i>Fitted with Mini Mk8 MM</i>		CP2MMK8/E/SM
260	Dual Fuel UL Panel 110V <i>Fitted with Mini Mk8 MM</i>		CP2MMK8/E/110/SM
261	Flying Lead <i>3m(9.8ft) flying lead longer lengths available on request</i>		CP1SMFLY

Equipped with Autoflame Mini Mk8 MM controller. NEMA4 powder coated enclosure to match Mini Mk8 MM. Fully wired and tested. Supplied with control panel drawings.

*Standard panel size – 320mm x 320mm x 210mm enclosure (12.6" x 12.6" x 8.3"),
371mm x 320mm x 214mm mounting bracket (14.6" x 12.6" x 8.3")*

Standard scope of supply includes:

*Fuel select Off/Fuel 1 switch (single fuel) or Fuel Select FUEL 1/OFF/FUEL 2 switch (dual fuel) –
Burner On/Off Switch – Error/Lockout Lamp.*

A 3Phase Direct Online Motor Starter up to 7.5kW (10HP) can be added to this panel and can be used in conjunction with an external Variable Speed Drive.

Note: Mini Mk8 MM only. Control circuit transformers cannot be added to this panel. Also additional lamps/switches, fuses and contactors are not available due to panel size.

Please contact Autoflame before ordering a panel so that the specifics can be determined at an early date. After receiving an order for a panel, drawings will be submitted for approval by the customer.

Once approved, manufacturing will commence. Lead-times on control panels vary from 4 to 6 weeks from approval of drawings. Prices are subject to change due to specific customer requirements.

Custom sizes are available on request. Please contact Autoflame for further information and a quote on non-standard panels.

5.10 Danfoss Variable Speed Drives – Panel Mounted

Item No.	Danfoss Variable Speed Drives – Panel Mounted VLT® HVAC IP20 Drive 380/480V 3 Phase, 50/60Hz	Kgs	Part No.
262	1.1kW/1.5hp <i>To fit 1000x600x300mm (39"x24"x12") panel</i>		1K1PANEL
263	1.5kW/2.0hp <i>To fit 1000x600x300mm (39"x24"x12") panel</i>		1K5PANEL
264	2.2kW/2.9hp <i>To fit 1000x600x300mm (39"x24"x12") panel</i>		2K2PANEL
265	3kW/4.0hp <i>To fit 1000x600x300mm (39"x24"x12") panel</i>		3KPANEL
266	4kW/5.0hp <i>To fit 1000x600x300mm (39"x24"x12") panel</i>		4KPANEL
267	5.5kW/7.5hp <i>To fit 1000x600x300mm (39"x24"x12") panel</i>		5K5PANEL
268	7.5kW/10hp <i>To fit 1000x600x300mm (39"x24"x12") panel</i>		7K5PANEL
269	11kW/15hp <i>To fit 1200x600x400mm (47"x31"x16") panel</i>		11KPANEL
270	15kW/20hp <i>To fit 1600x600x400mm (63"x24"x16") panel</i>		15KPANEL
271	18.5kW/25hp <i>To fit 1600x600x400mm (39"x24"x16") panel</i>		18K5PANEL
272	22kW/30hp <i>To fit 1600x600x400mm (39"x24"x16") panel</i>		22KPANEL
273	30kW/40hp <i>To fit 1600x600x400mm (39"x24"x16") panel</i>		30KPANEL
274	37kW/50hp <i>To fit 1600x600x400mm (39"x24"x16") panel</i>		37KPANEL
275	45kW/60hp <i>To fit 1600x600x500mm (39"x24"x20") panel</i>		45KPANEL
276	55kW/75hp <i>To fit 1600x600x500mm (39"x24"x20") panel</i>		55KPANEL
277	75kW/100hp <i>To fit 1600x600x500mm (39"x24"x20") panel</i>		75KPANEL
278	90kW/125hp <i>To fit 1600x600x500mm (39"x24"x20") panel</i>		90KPANEL
<i>To be ordered in addition to a factory built control panel.</i>			
<i>Graphical Keypad, DC Link Chokes for Harmonic Suppression & RFI Filters to meet Class C2 & C1 are fitted as standard.</i>			
<i>Price includes Danfoss Variable Speed Drive, Motor Protection Circuit Breaker, (to UL specifications) and increase in panel size from Autoflame standard panel sizes to allow for internal installation.</i>			
<i>If externally mounted IP55/IP66 or 200/240V drives are required please contact Autoflame for more information.</i>			

5.11 Danfoss Variable Speed Drives – Stand Alone

Item No.	Danfoss Variable Speed Drives – Stand Alone VLT® HVAC IP20 Drive 380/480V 3 Phase, 50/60Hz	Kgs	Part No.
279	1.1kW/1.5hp		FC10P1K1T4
280	1.5kW/2.0hp		FC10P1K5T4
281	2.2kW/2.9hp		FC10P2K2T4
282	3kW/4.0hp		FC10P3K0T4
283	4kW/5.0hp		FC10P4K0T4
284	5.5kW/7.5hp		FC10P5K5T4
285	7.5kW/10hp		FC10P7K5T4
286	11kW/15hp		FC10P11KT4
287	15kW/20hp		FC10P15KT4
288	18.5kW/25hp		FC10P18KT4
289	22kW/30hp		FC10P22KT4
290	30kW/40hp		FC10P30KT4
291	37kW/50hp		FC10P37KT4
292	45kW/60hp		FC10P45KT4
293	55kW/75hp		FC10P55KT4
294	75kW/100hp		FC10P75KT4
295	90kW/125hp		FC10P90KT4
<p><i>Graphical Keypad, DC Link Chokes for Harmonic Suppression & RFI Filters to meet Class C2 & C1 are fitted as standard.</i></p> <p><i>If externally mounted IP55/IP66 or 200/240V drives are required please contact Autoflame for more information.</i></p>			

5.12 Direct Online Motor Starter

Item No.	Direct Online Motor Starter	Kgs	Part No.
296	1.1 - 7.5 kW / 1.5 - 10 hp <i>Can only be ordered with Autoflame panel</i>		DOL11/75
297	11kW / 15hp <i>Can only be ordered with Autoflame panel</i>		DOL11
298	15 kW / 20hp <i>Can only be ordered with Autoflame panel</i>		DOL15
299	18.5kW / 25hp <i>Can only be ordered with Autoflame panel</i>		DOL18
300	22 kW / 30hp <i>Can only be ordered with Autoflame panel</i>		DOL22

Price includes UL compliant contactor, overload and Motor Protection Circuit Breaker.

Max 2 per standard panel- 800mm x 600mm x 300mm enclosure (31.4" x 23.6" x 11.8")

Max 3 per standard large panel- 800mm x 600mm x 300mm enclosure (31.4" x 23.6" x 11.8")

For Star Delta or Soft Starts contact Autoflame for further information.

5.13 Direct Online Motor Starter

Item No.	Direct Online Motor Starter	Kgs	Part No.
301	1.1 - 7.5 kW / 1.5 - 10 hp <i>Can only be ordered with Autoflame panel</i>		DOLMCP11/75
302	11kW / 15hp <i>Can only be ordered with Autoflame panel</i>		DOLMCP11
303	15 kW / 20hp <i>Can only be ordered with Autoflame panel</i>		DOLMCP15
304	18.5kW / 25hp <i>Can only be ordered with Autoflame panel</i>		DOLMCP18
305	22 kW / 30hp <i>Can only be ordered with Autoflame panel</i>		DOLMCP22

Price includes UL compliant contactor, overload and Motor Protection Circuit Breaker.

Max 2 up to 15kW (20hp) per standard panel- 800 x 600 x 300 mm enclosure (31.4" x 23.6" x 11.8").

Max 1 for 18.5 to 22kW (25 to 30 hp) or max 3 up to 15kW (20hp) per standard large panel- 800 x 800 x 300 mm enclosure (31.4" x 31.4" x 11.8").

Max 2 for 18.5 to 22kW (25 to 30hp) per extra large panel – 1000 x 800 x 300mm enclosure (39" x 31.4" x 11.8").

For Start Delta starters or soft starters contact Autoflame for further information.

5.14 VSD Bypass Switch – Single Fuel

Item No.	VSD By-pass Switch	Kgs	Part No.
306	Single Fuel 1.1 - 7.5 kW / 1.5 - 10 hp <i>Can only be ordered with Autoflame panel</i>		CP1VSD11/75
307	Single Fuel 11 - 18.5 kW / 15 - 25 hp <i>Can only be ordered with Autoflame panel</i>		CP1VSD11/18
308	Single Fuel 15 kW / 20 hp <i>Can only be ordered with Autoflame panel</i>		CP1VSD15
309	Single Fuel 18.5 kW / 25 hp <i>Can only be ordered with Autoflame panel</i>		CP1VSD18
310	Single Fuel 22 kW / 30 hp <i>Can only be ordered with Autoflame panel</i>		CP1VSD22
311	Single Fuel 30 kW / 40 hp <i>Can only be ordered with Autoflame panel</i>		CP1VSD30
312	Single Fuel 37 kW / 50 hp <i>Can only be ordered with Autoflame panel</i>		CP1VSD37
313	Single Fuel 45 kW / 60 hp <i>Can only be ordered with Autoflame panel</i>		CP1VSD45
<p><i>Price includes UL compliant contactor (with overload), Motor Protection Circuit Breaker (to UL specifications), switch and Variable Speed Drive or direct fuel curve switching.</i></p> <p><i>Prices for larger kW(hp) drive switches are available on request. Please contact Autoflame for more information.</i></p>			

5.15 VSD Bypass Switch – Dual Fuel

Item No.	VSD By-pass Switch	Kgs	Part No.
314	Dual Fuel 1.1 - 7.5 kW / 1.5 - 10 hp <i>Can only be ordered with Autoflame panel</i>		CP2VSD11/75
315	Dual Fuel 11 - 18.5 kW / 15 - 25 hp <i>Can only be ordered with Autoflame panel</i>		CP2VSD11/18
316	Dual Fuel 15 kW / 20 hp <i>Can only be ordered with Autoflame panel</i>		CP2VSD15
317	Dual Fuel 18.5 kW / 25 hp <i>Can only be ordered with Autoflame panel</i>		CP2VSD18
318	Dual Fuel 22 kW / 30 hp <i>Can only be ordered with Autoflame panel</i>		CP2VSD22
319	Dual Fuel 30 kW / 40 hp <i>Can only be ordered with Autoflame panel</i>		CP2VSD30
320	Dual Fuel 37 kW / 50 hp <i>Can only be ordered with Autoflame panel</i>		CP2VSD37
321	Dual Fuel 45 kW / 60 hp <i>Can only be ordered with Autoflame panel</i>		CP2VSD45
<p><i>Price includes UL compliant contactor (with overload), Motor Protection Circuit Breaker (to UL specifications) and switches.</i></p> <p><i>Prices for larger kW(hp) drive switches are available on request. Please contact Autoflame for more information.</i></p>			

5.16 MM System Spares

Item No.	MM System Spares	Kgs	Part No.
322	Mk7 MM Software* Includes 2 EPROMS and display SD card	0.30	MK7PROMS
323	Mk7 MM Software with WLC MM software* Includes 3 EPROMS and display SD card	0.40	MK7PROMS/WL
324	Mk7 or Mk6 MM Connector Plugs Set of 9	0.50	CON1060
325	Mini Mk6 MM Connector Plugs Set of 7	0.50	CON1064
326	Mini Mk5 Evolution MM Connector Plugs Set of 3	0.50	CON1069
327	Mini Mk7 Evolution MM Connector Plugs Set of 7	0.50	CON1070
328	Adaptor Plate for Mk7 MM to Mini Mk8 MM	0.10	ENC10073
329	MM Enclosure Mounting Clamps Set of 4	0.10	ENC10061
330	MM Expansion PCB Enclosure + Pillars	0.20	ENC10065
331	Expansion PCB Control Connector Plugs Set of 5	0.50	CON1068
332	2A (T) Fuse Set of 10	0.10	FU10034
333	6.3A (T) Fuse Set of 10- Mk7, Mini Mk6 and Mk6 only	0.10	FU10026
334	(TE5) 2A (T) Fuse Set of 10- Mini Mk6 and Mk6 only	0.10	FU10027
335	(TE5) 630 mA (T) Fuse Set of 10- Mini Mk6 and Mk6 only	0.10	FU10028
336	(TE5) 0.315A (T) Fuse Set of 10- mini Mk5 EVO only	0.10	FU10024
337	5A (T) Fuse Set of 10- Mini Mk8, Mini Mk7 and Mini Mk5 EVO only	0.10	FU10035
338	630 mA (T) Fuse Set of 10- Mini Mk5 only	0.10	FU10025
339	125 mA (220V) Fuse Set of 10- Mk5 only	0.10	FU10022
340	250 mA (110V) Fuse Set of 10- Mk5 only	0.10	FU10023
341	500 mA (T) Fuse Set of 10 Mk 7	0.10	FU10040
342	1A (T) Fuse Set of 10 Mk 7	0.10	FU10041
343	2.5A (T) Fuse Set of 10 Mk 7	0.10	FU10042

*To ensure correct software is sent, please specify unit serial number.

5.17 Mk8 EGA System Spares

Item No.	Mk8 EGA System Spares	Kgs	Part No.
344	Mk8 O2 Sensor <i>For the Mk8 EGA</i>	0.02	SP80004
345	Mk8 CO2 Sensor <i>Can be fitted by factory trained personnel</i>	0.09	SP80005
346	Mk8 NO Sensor <i>For the Mk8 EGA</i>	0.04	SP80007
347	Mk8 CO Sensor <i>For the Mk8 EGA</i>	0.04	SP80008
348	Mk8 SO2 Sensor <i>For the Mk8 EGA</i>	0.01	SP80013
349	Mk8 NO2 Sensor <i>For the Mk8 EGA</i>	0.04	SP80037
350	Mk8 EGA Replacement Air Inlet Filter <i>For the Mk8 EGA</i>	0.06	EGA80107
351	Mk8 EGA Fan <i>For the Mk8 EGA</i>	0.10	SP10035/8
352	EGA Fuse <i>For the Mk8, Mk7 and Mk6 EGA</i>	0.10	SP1040
353	EGA Pump 24V <i>For the Mk8, Mk7 and Mk6 EGA</i>	0.33	SP70010
354	EGA Replacement Internal Filter <i>For the Mk8, Mk7 and Mk6 EGA</i>	0.06	SP10011
355	EGA Type K Thermocouple only <i>3m (10ft) cable length</i>	0.25	SP1044
356	EGA Type K Thermocouple only <i>5m (16ft) cable length</i>	0.25	SP1044/5
357	EGA Type K Thermocouple only <i>10m (33ft) cable length</i>	0.25	SP1044/10
358	Mk8 EGA Mains & Data Flying Leads <i>For the Mk8 EGA</i>		CON8010
359	EGA Replacement External Particulate Filter <i>Suitable for Mk6, Mk7 and Mk8 EGA's</i>	0.06	SP10018
360	EGA Replacement Sampling Probe Filter & Tubing <i>For the Mk8 and Mk7 EGA Probe, 3m (10ft)</i>	0.15	SP70012

5.18 Mk7 EGA System Spares

Item No.	Mk7 EGA System Spares	Kgs	Part No.
361	Mk7 EGA Software* <i>Includes 1 EPROM and display SD card</i>	0.20	MK7EGAPROMS
362	Mk7 EGA CEMS Software Upgrade** <i>EGA must be returned to Autoflame for CEMS upgrade</i>	0.01	MK7EGACEMS
363	Mk7 O2 Sensor <i>For the Mk7 EGA</i>	0.02	SP70004
364	Mk7 CO2 Sensor <i>Mk7 EGA must be returned for this part to be changed.</i>	0.09	SP70005
365	Mk7 NO Sensor <i>For the Mk7 EGA</i>	0.04	SP70007
366	Mk7 CO Sensor <i>For the Mk7 EGA</i>	0.04	SP70008
367	Mk7 SO2 Sensor <i>For the Mk7 EGA</i>	0.01	SP70013
368	Mk7 NO2 Sensor <i>For the Mk7 EGA</i>	0.04	SP70037
369	Mk7 EGA Replacement Air Inlet Filter <i>For the Mk7 EGA</i>	0.06	EGA70107
370	Mk7 EGA Replacement RH Sensor <i>For the Mk7 EGA</i>	0.10	SP70040
371	Mk7 EGA Fan <i>For the Mk7 EGA, For Mk6 EGA Fan Part No SP10035</i>	0.10	SP10035/7
372	EGA Fuse <i>For the Mk8, Mk7 and Mk6 EGA</i>	0.10	SP1040
373	EGA Pump 24V <i>For the Mk8, Mk7 and Mk6 EGA</i>	0.33	SP70010
374	EGA Replacement Internal Filter <i>For the Mk8, Mk7 and Mk6 EGA</i>	0.06	SP10011
375	EGA Type K Thermocouple only <i>3m (10ft) cable length</i>	0.25	SP1044
376	EGA Type K Thermocouple only <i>5m (16ft) cable length</i>	0.25	SP1044/5
377	EGA Type K Thermocouple only <i>10m (33ft) cable length</i>	0.25	SP1044/10
378	EGA Connector Plugs <i>16 poles 1 set of 2 plugs (For the Mk7 and Mk6 EGA)</i>	0.50	CON1010
379	EGA Replacement Sampling Probe Filter & Tubing <i>For the Mk8 and Mk7 EGA Probe, 3m (10ft)</i>	0.15	SP70012
<p>* To ensure correct software is sent, please specify unit serial number.</p> <p>** Please note that if you request to have your Standard EGA upgraded to include CEMS software it is compulsory that a standard service and calibration is carried out.</p>			

5.19 Mk6 EGA System Spares

Item No.	Mk6 EGA System Spares	Kgs	Part No.
380	EGA Replacement Mk6 Sampling Probe Filter & Tubing <i>For the Mk6 EGA Probe, 3m(10ft)</i>	0.15	SP10012
381	Mk6 O2 Sensor to be supplied without cell holder <i>Mk6 EGA cell holders will be recycled if returned to Autoflame</i>	0.02	SP10004
382	Mk6 CO2 Sensor <i>For the Mk6 EGA(only Mk6 CO2 sensor)</i>	0.09	SP70006
383	Mk6 CO2 Sensor Conversion Kit <i>For the Mk6 EGA, include CO2 cell and kit to upgrade</i>	0.10	SP70006/KIT
384	Mk6 NO Sensor <i>For the Mk6 EGA</i>	0.04	SP10007
385	Mk6 CO Sensor <i>For the Mk6 EGA</i>	0.04	SP10008
386	Mk6 SO2 Sensor <i>For the Mk6 EGA</i>	0.01	SP10013
387	Mk6 NO2 Sensor <i>For the Mk6 EGA</i>	0.04	SP10037
388	Mk6 EGA Replacement Air Inlet Filter <i>For the Mk6 EGA</i>	0.06	SP10018

5.20 O2 Interface Modules

Item No.	O2 Interface Modules	Kgs	Part No.
389	O2 Interface Module, 230V	0.65	MM10013
390	O2 Interface Module, 110V	0.65	MM10013/110
391	Mk8 O2 Interface Module (Universal Voltage, 110V/230V) <i>For use with Mini Mk8 MM and Mk8 MM</i>	0.65	MM88002

5.21 DTI System Spares

Item No.	DTI System Spares	Kgs	Part No.
392	Mk6 DTI Fuse	0.10	SP1060
393	MK7 and Mk6 DTI Connector Plugs set of 6	0.50	CON1065
394	Digital I/O Connector Plugs	0.50	CON1066
395	Analogue I/O Connector Plugs	0.50	CON1067
396	Universal I/O Connector Plugs	0.50	CON7066

5.22 Sundries and Spare Parts

Item No.	Sundries and Spare Parts	Kgs	Part No.
397	Autoflame M.M./EGA Sales Brochure <i>US/Letter Format</i>	0.10	SP2000/US
398	Tamper Proof Screwdriver <i>Setting up servo motors</i>	0.07	SP10002
399	63VA Transformer, 230-24V <i>UK specification for servo motors</i>	0.65	SP10003
400	63VA Transformer, 110-24V <i>USA specification for servo motors</i>	0.65	SP10003/110
401	Ferrite Core Set 3 off	0.22	SU10010
402	Anti Voltage Surge Module, 230V	0.15	SU10011
403	Anti Voltage Surge Module, 110V	0.15	SU10011/110
404	Electrical Snubber, 230V* <i>Type reference must be shown on purchase order</i>	0.05	SU10030
405	Electrical Snubber, 110V* <i>Type reference must be shown on purchase order</i>	0.05	SU10040

*Please contact Autoflame for a type reference prior to ordering.

5.23 Servo Motor Spares

Item No.	Servo Motor Spares	Kgs	Part No.
406	Small Servo Motor Fixing Screws M5 x 35mm, set 4	0.01	F5015
407	Small Servo Motor Mounting Bracket/Coupling <i>Retrofit application for burner air damper</i>	0.50	SP10015
408	Small Valve to Large Servo Motor Mounting Coupling <i>Gas valve only applications</i>	0.50	SP10017
409	Large Servo Motor Fixing Screws M6 x 45mm, set 4	0.01	F6015
410	Large Servo Motor Mounting Bracket/Coupling <i>Retrofit application for burner air damper</i>	0.50	SP10016
411	Industrial Servo Motor 05 Mounting Bracket/Coupling <i>For MM10070</i>	0.80	SP10028/05
412	Industrial Servo Motor 10 Mounting Bracket/Coupling <i>For MM10072</i>	0.80	SP10028/10
413	Industrial Servo Motor 20/40 Mounting Bracket/Coupling <i>For MM10074/B & MM10078</i>	1.00	SP10028/20
414	Solid State Relay Module <i>Used in conjunction with a Unic 20/40 Motor</i>	1.00	MM10070/RK

5.24 Oil Valve Spares

Item No.	Oil Valve Spares	Kgs	Part No.
415	Viton O-ring Type 1,2,5,6,8,9 Small Oil Valve Set of 2	0.01	OR70003
416	Viton O-ring Type 3,4,7 Large Oil Valve Set of 2	0.01	OR70004

*These can only be installed by approved by Autoflame Tech Centre engineers.

5.25 Water Level Spares

Item No.	Water Level Spares	Kgs	Part No.
417	0.5" Water Valve Repair Kit <i>Spare parts for New Style water valve fitted with Tekfil seats</i>		WLCV015/KIT
418	0.75" Water Valve Repair Kit <i>Spare for New Style water valve fitted with Tekfil seats</i>		WLCV020/KIT
419	1" Water Valve Repair Kit <i>Spare parts for New Style water valve fitted with Tekfil seats</i>		WLCV025/KIT
420	1.5" Water Valve Repair Kit <i>Spare parts for New Style water valve fitted with Tekfil seats</i>		WLCV040/KIT
421	2" Water Valve Repair Kit <i>Spare parts for New Style water valve fitted with Tekfil seats</i>		WLCV050/KIT
422	Water Level Probes Flying Leads <i>Replacement flying leads for water level probes, 2m(6ft)</i>		WLCPLEAD
423	Mounting Bracket & Coupling for 0.5", 0.75" water valve <i>Includes fixing screws & washers</i>		SP30011
424	Mounting Bracket & Coupling for 1" PN40 water valve <i>Includes fixing screws & washers</i>		SP30012
425	Mounting Bracket & Coupling for 1.5" PN40 water valve <i>Includes fixing screws & washers</i>		SP30013
426	Mounting Bracket & Coupling for 2" PN40 water valve <i>Includes fixing screws & washers</i>		SP30014
427	Mounting Bracket & Coupling for 1" ANSI 300lb water valve <i>Includes fixing screws & washers</i>		SP30012/U
428	Mounting Bracket & Coupling for 1.5" ANSI 300lb water valve <i>Includes fixing screws & washers</i>		SP30013/U
429	Mounting Bracket & Coupling for 2" ANSI 300lb water valve <i>Includes fixing screws & washers</i>		SP30014/U

5.26 CB Gears Drive Assembly

Item No.	CB Gears Drive Assembly	Kgs	Part No.
430	Gear Drive Assembly 96" 400-800hp, Shaft diameter 3.23"		MMGR001
431	Gear Drive Assembly 96" 400-800hp, Shaft diameter 2.988"		MMGR002
432	Gear Drive Assembly 78" 250-350hp, Shaft diameter 2.4750"		MMGR003
433	Gear Drive Assembly 60" 50-200hp, Shaft diameter 2.3745"		MMGR004

5.27 Cables

Item No.	Cables	Kgs	Part No.
434	Screened Cable 1 core 16-02-1C	5.00	CAB50001
435	Screened Cable 2 core 16-02-2C	5.00	CAB50002
436	Screened Cable 3 core 16-02-3C	5.00	CAB50003
437	Screened Cable 4 core 16-02-4C	5.00	CAB50004
438	Screened Cable 6 core 16-02-6C	5.00	CAB50006
439	Screened Cable 8 core 16-02-8C	5.00	CAB50008
440	Screened Cable 10 core 16-02-10C	5.00	CAB50010
441	Screened Data Cable 1 pair	5.00	CAB50020
Prices per 100m			

5.28 Relays

Item No.	Relays	Kgs	Part No.
442	Relay LY2 12V DC	0.04	EC50200
443	Relay Base 12V	0.05	EC50201
444	Relay MY 240V AC	0.04	EC50206
445	Relay Base 240V	0.05	EC50207

5.29 Demo/Test Equipment

Item No.	Demo/Test Equipment	Kgs	Part No.
446	Mk8 MM Water Level Demo Case 230V <i>Includes Water Level Control and First Out Annunciation</i>	13.00	MM10035/WL
447	Mk8 MM Water Level Demo Case 110V <i>Includes Water Level Control and First Out Annunciation</i>	13.00	MM10035/110
448	Converting Mk7 Demo case to Mini Mk8 MM Demo Case <i>Includes Mini Mk8 MM and all work needed</i>	13.00	REPAIRDEMO
449	Mini Mk8 MM Demo Case, 230V <i>Includes Autoflame internal flame safeguard controller</i>	9.00	MM10036
450	Mini Mk8 MM Demo Case, 120V <i>Includes Autoflame internal flame safeguard controller</i>	9.00	MM10036/110
451	DTI Demo Case, 230V <i>Includes Analogue and Digital I/O</i>	12.00	MM10027
452	DTI Demo Case, 120V <i>Includes Analogue and Digital I/O</i>	12.00	MM10027/110

5.30 Engineering Services

Item No.	Engineering Services	Kgs	Part No.
453	Combustion Efficiency Audit <i>Per Boiler Plant</i>		
454	Engineering Consultancy <i>Daily Rate</i>		
<p><i>Audit includes review of boiler plant, report outlining efficiency calculations and recommendations.</i> <i>Pricing allows for one day on site reviewing boiler plant, and does not include travel expenses which would be charged at cost. Final scope to be agreed prior to audit.</i></p> <p><i>Scope of consultancy work to be agreed and documented prior to engagement. Expert capabilities include boiler plant design, control system design, burner design recommendations.</i></p> <p><i>For more information please contact Autoflame.</i></p>			

5.31 Technical Manual & Product Catalogue

Item No.	Technical Manual & Product Catalogue	Kgs	Part No.
455	Complete Volume Set of Technical Manuals <i>Consisting of TECHMAN2 – 13</i>		TECHMAN1
456	Mk7 MM Installation and Commissioning Guide		TECHMAN2
457	Mini Mk8 MM Installation and Commissioning Guide		TECHMAN3
458	MM Application Possibilities		TECHMAN4
459	Valves and Servomotors		TECHMAN5
460	Mk8 EGA Set-Up and Trim Guide		TECHMAN6
461	Expansion Board Set-Up Guide		TECHMAN8
462	Mk7 DTI Set-Up Guide		TECHMAN9
463	Mk7 MM End User Guide		TECHMAN10
464	Mini Mk8 MM End User Guide		TECHMAN11
465	Expansion Board End User Guide		TECHMAN12
466	Product Catalogue		TECHMAN13

6 Repairs

Please note the indicated price is a minimum price quoted and is not the final invoice price. The exact cost can only be established on completion of all repair work. Any units which are deemed to be Beyond Economical Repair will be held in quarantine for a maximum of 6 months. During this time the customer will be informed and may have the unit returned un-repaired or scrapped by Autoflame on their behalf. Any warranty returns to stock will be subject to testing before a decision is made for credit. This may also incur a re-stocking charge.

6.1 MM Control Modules Standard Repair

Item No.	MM Control Modules Standard Repair	Kgs	Part No.
467	Repair Mk7 MM Module MM70001/E, MM70001/E/WL	3.50	REPAIRMK7
468	Repair Mini Mk8 MM Module MMM8002	2.50	REPAIRMMM8002
469	Repair Mini Mk7 Evolution MM Module MMM7002/E, MMM7002/E/110	2.50	REPAIRMMM7002/E
470	Repair Mini Mk5 Evolution MM Module MMM5002/E, MMM6002/E/110	2.50	REPAIRMMM5002/E
Please note if you return your MM control module for repair whilst it is still within its warranty period and we find no faults with your unit, a standard inspection charge will be applicable.			

6.2 EGA Standard Repair

Item No.	EGA Standard Repair	Kgs	Part No.
471	Service/Repair Mk8 EGA (MM82004) Without O2, CO & NO cells being replaced	11.00	REPAIREGA8/NC
472	Service/Repair Mk8 EGA (MM82004) With O2, CO & No cells being replaced	11.00	REPAIREGA8
473	Repair Mk7 EGA (MM72004) Without O2, CO & No cells being replaced	11.00	REPAIREGA7/NC
474	Repair Mk7 EGA (MM72004) With O2, CO & NO cells being replaced	11.00	REPAIREGA7
475	Repair Mk5 EGA (MM10002) Service and calibration only – excluding parts	11.00	REPAIREGA5
476	Repair Internal EGA Filter SP10011	0.06	REPAIRSP10011
477	Repair EGA Sampling Probe MM10033, EGA20002	1.00	REPAIR1003
478	Repair EGA Cell O2/CO/CO2/SO2/NO Covers all EGA cells featured in Mk6, Mk7 and Mk8 EGAs	0.50	REPAIREGACELL
479	Repair Thermocouple SP1004	0.25	REPAIRT-COUPLE
480	Repair External Particulate Filter EGA20103/D	3.50	REPAIR20103
481	Repair Mk6, Mk7 & Mk8 EGA Pump 24V SP10010	0.33	REPAIRSP10010

6.3 Servomotor Standard Repair

Item No.	Servomotor Standard Repair	Kgs	Part No.
482	Repair Small Servomotor MM10005, MM10005/B, MM10005/D	0.55	REPAIR1005
483	Repair Large Servomotor MM10004, MM10004/D, MM10004/EXP, MM10004/D/EXP	1.85	REPAIR1004
484	Repair Industrial Servomotor 05 MM10070, MM10070/110, BBA10070	4.00	REPAIR1070
485	Repair Industrial Servomotor 10 MM10072, MM10072/110, BBA10072	4.00	REPAIR1072
486	Repair Industrial Servomotor 20 MM10074, MM10074/B, MM10074/B/110	6.00	REPAIR1074
487	Repair Industrial Servomotor 40 MM10078, MM10078/110	8.00	REPAIR1078

6.4 Temperature & Pressure Detector Standard Repair

Item No.	Temperature & Pressure Detector Standard Repair	Kgs	Part No.
488	Repair and Test Temperature Load Detector MM1006/100/150/200/250/400	0.45	REPAIR1006
489	Repair and Test Pressure Load Detector MM10008, MM10008U	0.21	REPAIR1008
490	Repair and Test Pressure Load Detector MM10009, MM10009U	0.21	REPAIR1009
491	Repair and Test Pressure Load Detector MM10010, MM10010U	0.21	REPAIR 1010
492	Repair and Test Temperature Load Detector MM10006/100/150/200/250/400U	0.45	REPAIR1006U

6.5 Gas, Air & Oil Pressure Sensor Standard Repair

Item No.	Gas, Air & Oil Pressure Sensor Standard Repair	Kgs	Part No.
493	Repair Gas Pressure Sensor Covers Mk6, Mk7 and Mk8 Series of Sensors	0.42	REPAIR6006
494	Repair Air Pressure Sensor Covers Mk6, Mk7 and Mk8 Series of Sensors	0.42	REPAIR6005
495	Repair Oil Pressure Sensor MM60009	0.42	REPAIR6009

6.6 UV Sensor Standard Repair

Item No.	UV Sensor Standard Repair	Kgs	Part No.
496	Repair Self UV Scanner MM60003/HS, MM60003/HS/SV	0.80	REPAIR6003
497	Repair Self Check IR Scanner MM60016, MM70017	0.80	REPAIRIR
498	Repair High Sensitivity Self Check UV Scanner MM60003/HS	0.80	REPAIR6003/HS
499	Repair UV Scanner MM60004, MM60004/U	0.20	REPAIR6004
500	Repair High Sensitivity UV Scanner MM60004/HSU	0.20	REPAIR6004/HS

6.7 DTI & IO Module Standard Repair

Item No.	DTI & IO Module Standard Repair	Kgs	Part No.
501	Repair DTI Module DTI60100, DTI60100/110, DTI70100	4.50	REPAIRDTI
502	Repair Digital IO Module DTI20020, DTI20020/110	1.00	REPAIRDTI20020
503	Repair Analogue IO Module DTI20021, DTI20021/110	1.00	REPAIRDTI20021
504	Repair Universal IO Module DTI70022	1.00	REPAIRDTI70022
505	Repair Old DTI Module DTI20010, DTI20010/110	3.50	REPAIRDTI20010
506	Repair Inverter Interface Module MM10011, MM10011/110	0.65	REPAIR11
507	Repair Signal Convertor SP10020, SP10021	2.50	REPAIR/SIGNAL
508	Outside Temperature Sensor MM60007	0.32	REPAIR6007

6.8 Water Level Control Equipment Standard Repair

Item No.	Water Level Control Equipment Standard Repair	Kgs	Part No.
509	Repair Water Level Feed Water Valve WLCV	7.00	REPAIRWLCV
510	Repair Water Level Capacitance Probe WLCP500, WLCP750, WLCP1000, WLCP1250, WLCP1500	1.50	REPAIRWLCP
511	Repair TDS TDS60001, TDS60001/110	3.00	REPAIRTDS

6.9 Gas & Oil Valve Standard Repair

Item No.	Water Level Control Equipment Standard Repair	Kgs	Part No.
512	Repair/Test Gas Valve Any gas valve - please quote number	2.00	REPAIRGVALVE
513	Repair/Test Oil Valve Any oil valve - please quote number	2.00	REPAIROVALVE

Price List Terms and Conditions

All prices indicated are ex-works.

Standard Warranty

- * Electronic Equipment and assemblies: 2 years from date of sale
- * Electro-mechanical assemblies and parts: 2 years from date of sale
- * EGA system. Parts, components and sensors: 1 year from date of sale
- * EGA cells: 1 year from date of sale
- * IR Scanner: 1 year from date of sale
- * UV Scanners: 1 year from date of sale

Please note that prices shown may change subject to a 3% currency fluctuation

A full statement of our business terms and conditions are printed on the reverse of all invoices and shown in the Price List. A copy can be issued on written request.

Please do not hesitate to contact Autoflame for price or availability of any specific item that are not listed in this price list.

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